Predicting Proficiency on the New Jersey State Learning Assessment (NJSLA) Based on NWEA MAP Growth Scores

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NWEA Psychometrics and Analytics

Linking Study Updates

Date	Description
2016-11	Initial multi-state linking study conducted for PARCC using Spring 2016 data for mathematics and ELA in grades 3–8.
2020-01-31	Updated the report to reflect the new NWEA branding.
2023-05-22	Updated results for mathematics & ELA in grades 3–8 and for science in grades 5 & 8 using Spring 2022 data.
2025-08	Updated the linking study based on the 2025 norms.

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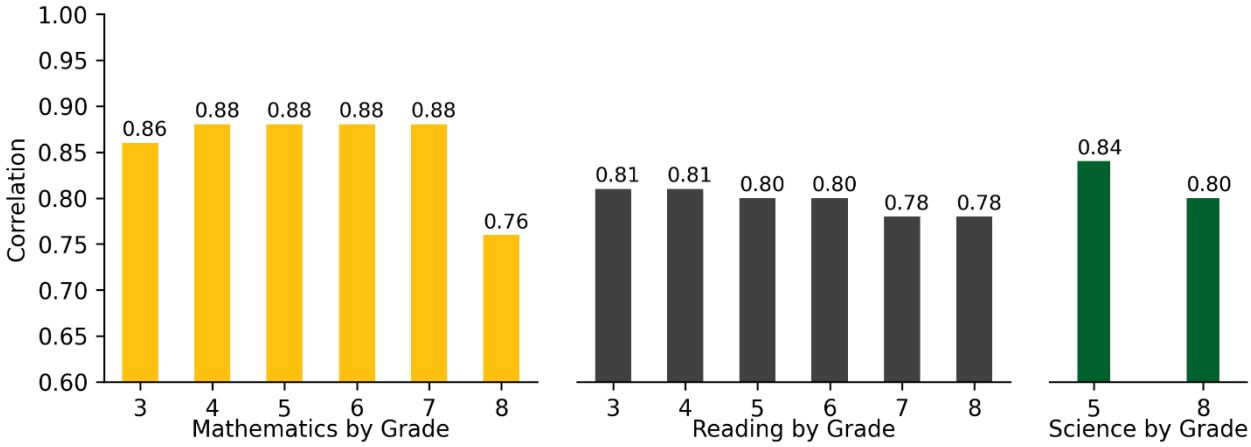
Executive Summary

Linking studies allow partners to use MAP® Growth™ Rasch Unit (RIT) scores throughout the year to predict students' likely performance levels on state summative assessments. This is accomplished through statistical analyses that produce RIT cut scores that correspond to state summative performance levels. A "cut score" is the minimum score a student must get on a test to be placed in a certain performance level. The linking study for the New Jersey State Learning Assessment (NJSLA) described in this report provides RIT cut scores for the fall, winter, and spring MAP Growth administrations that correspond to the NJSLA performance levels for mathematics and English language arts (ELA) in grades 3–8 and for science in grades 5 & 8.

The linking study is based on test scores from students who took both the MAP Growth and NJSLA in mathematics, ELA/reading, and science in Spring 2022 for the targeted grades. The linking study sample included 26,398 students across 12 districts and 76 schools in New Jersey. Scores from both tests were used as the basis for linking the two assessments together.

Before the linking analyses began, NWEA confirmed that the MAP Growth and NJSLA assessments were aligned to the same or similar set of content standards to warrant a connection. The link between the two tests was further investigated by calculating the Pearson correlation coefficients that describe the relationship between the specific MAP Growth and NJSLA scores. At NWEA, a correlation of $r \geq 0.70$ is considered "high" correlation and acceptable for publishing. This indicates that students who perform well on one assessment also tend to perform well on the other, and vice versa. A perfect positive correlation is 1.00. The correlations between the MAP Growth and NJSLA test scores from Spring 2022, as shown in Figure E.1, are consistent with the expectations that MAP Growth is a good assessment for predicting performance on the NJSLA.

Figure E.1. Correlations Between MAP Growth and NJSLA Scores by Grade



The equipercentile linking method (Kolen & Brennan, 2004) was used to produce the RIT cut scores for the spring administration that correspond to performance levels on the NJSLA summative assessments for every subject and grade. MAP Growth cut scores for grade 2, as well as those for the fall and winter administrations of all grades, are also provided so that educators can track grade 2 students' progress on the NJSLA test by grade 3, alongside all

other students, early in the year. These cut scores were derived from the spring cuts[1] and the growth norms for the adjacent grades (i.e., grades 2 to 3), or fall and winter administrations to the spring administration. While RIT cut scores were generated for every performance level on the NJSLA summative assessments, Table E.1 presents the Level 4 cut scores for mathematics and ELA/reading, as well as the Level 3 cut scores for science, which indicate the minimum score a student must get to be considered proficient for accountability purposes.

Table E.1. MAP Growth RIT Cut Scores for NJSLA Proficiency

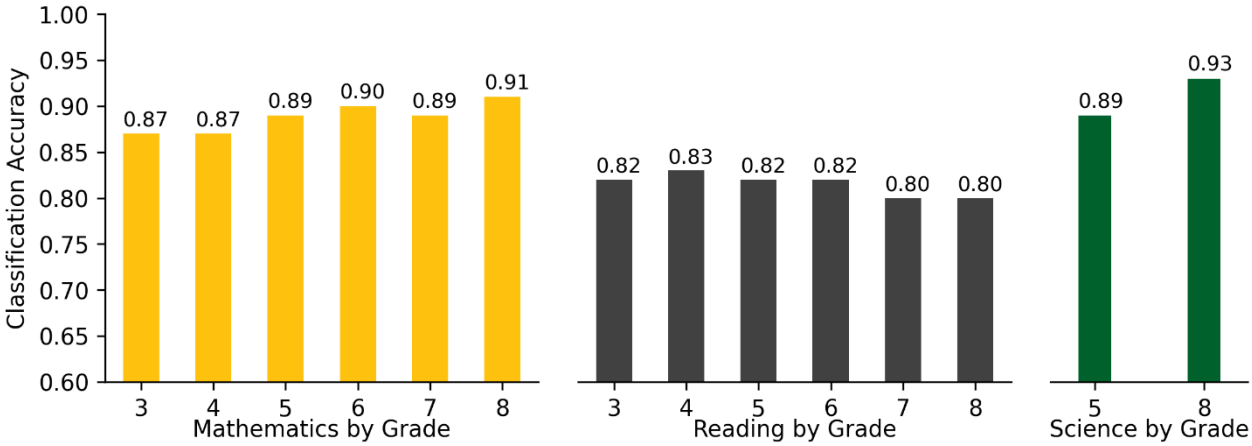
Assessment		Cut Scores by Grade						
		2	3	4	5	6	7	8
Mathematics								
NJSLA Spring		–	750	750	750	750	750	750
MAP Growth Mathematics	Fall	179	190	206	217	221	229	238
	Winter	187	199	214	223	228	234	243
	Spring	193	205	219	227	232	236	245
ELA/Reading								
NJSLA Spring		–	750	750	750	750	750	750
MAP Growth Reading	Fall	180	193	202	207	213	215	219
	Winter	186	198	205	209	215	216	220
	Spring	190	201	207	211	216	217	221
Science								
NJSLA Spring		–	–	–	200	–	–	200
MAP Growth Science	Fall	–	–	–	207	–	–	227
	Winter	–	–	–	210	–	–	228
	Spring	–	–	–	212	–	–	229

Educators can use these cut scores to determine whether students are on track for proficiency (Level 4 or higher for mathematics and ELA/reading and Level 3 or higher for science) on the state assessment. For example, the Level 4 cut score on the grade 3 NJSLA mathematics test is 750. A grade 3 student with a MAP Growth mathematics RIT score of 190 in the fall is likely to achieve proficiency on the NJSLA mathematics test in the spring, whereas a grade 3 student with a RIT score lower than 190 in the fall is in jeopardy of not achieving proficiency. MAP Growth cut scores for grade 2 are also provided so that educators can track early learners' progress toward expectations on the NJSLA by grade 3.

[1] To enhance content validity, NWEA developed an Enhanced Item-Selection Algorithm (EISA) for the MAP Growth assessment to prioritize grade-level content. A pilot study (Meyer et al., 2023) showed that students taking MAP Growth with EISA demonstrated higher average math scores compared with those taking traditional MAP Growth. To improve score comparability, NWEA (Lewis & Kuhfeld, 2024) developed concordance tables to adjust mathematics scores from traditional assessments to align with scores from MAP Growth with EISA, or vice versa. Given that the data for this study were collected from traditional MAP Growth tests but that the results will be used for MAP Growth with EISA, the spring cuts for mathematics were adjusted using the concordance tables before being used to derive other cut scores. This score adjustment will become unnecessary for future linking studies once the new data from EISA tests are collected.

As further evidence that MAP Growth scores can be used to predict students' proficiency on the state tests, NWEA calculated classification accuracy statistics that show how well the RIT scores can correctly classify, or predict, students as proficient (Level 4 or higher for mathematics and ELA/reading and Level 3 or higher for science) on the state tests.[2] For example, the grade 3 MAP Growth mathematics Level 4 cut score has a 0.87 accuracy rate, meaning it accurately predicted student performance on the state test for 87% of the sample. A high statistic indicates high accuracy. Overall, MAP Growth scores have a high accuracy rate of identifying student proficiency on the NJSLA tests, as illustrated in Figure E.2.

Figure E.2. Accuracy of MAP Growth Classifications by Grade



Please note that the purpose of this report is to explain NWEA's linking study methodology. It is not meant as the main reference for determining a student's likely performance on the state summative assessments. The cut scores in this report are based on the default instructional weeks most encountered for each term (i.e., Weeks 4, 20, and 32 for fall, winter, and spring, respectively), whereas instructional weeks often vary by district. The cut scores in this report may therefore differ from the results in the NWEA reporting system that reflect the specific instructional weeks set by partners. Partners should therefore reference their MAP Growth score reports instead.

[2] The classification accuracy calculations for the mathematics spring cuts were based on the concorded cut scores.

1. Introduction

1.1. Purpose of the Study

NWEA® is committed to providing partners with useful tools to help make inferences about student learning from MAP® Growth™ test scores. One important use of MAP Growth results is to predict a student's performance on state summative assessments at different times throughout the year. This allows educators and parents to determine if a student is on track in their learning to meet state standards by the end of the year or, given a student's learning profile, is on track to obtain rigorous, realistic growth in their content knowledge and skills.

This report presents results from a linking study conducted by NWEA aiming to statistically connect Rasch Unit (RIT) scores from the MAP Growth assessments with scores from the New Jersey State Learning Assessment (NJSLA) mathematics and English language arts (ELA)/reading in grades 3–8 and science in grades 5 and 8 taken during the Spring 2022 term. MAP Growth cut scores are also included for grade 2 so that educators can track early learners' progress toward proficiency on the NJSLA test by grade 3. Specifically, this report presents the following results:

1. Student sample demographics
2. Descriptive statistics of test scores
3. MAP Growth cut scores from fall, winter, and spring that correspond to the performance levels on the spring NJSLA
4. Classification accuracy statistics to determine the degree to which MAP Growth accurately predicts student proficiency status on the NJSLA tests
5. The probability of achieving grade-level proficiency on the NJSLA based on MAP Growth RIT scores from fall, winter, and spring

1.2. Assessment Overview

The NJSLA grades 3–8 mathematics and ELA/reading and grades 5 and 8 science tests are New Jersey's state summative assessments aligned to the New Jersey Student Learning Standards. Based on their test scores, students are placed into one of five performance levels for mathematics and ELA: Level 1 *(Did Not Yet Meet Expectations)*, Level 2 (*Partially Met Expectations)*, Level 3 (*Approached Expectations)*, Level 4 (*Met Expectations)*, and Level 5 (*Exceeded Expectations)* and four performance levels for science: Level 1 *(Below Proficiency)*, Level 2 *(Near Proficiency)*, Level 3 *(Proficient)*, and Level 4 *(Advanced Proficient)*. The Level 4 cut scores for mathematics and ELA/reading and the Level 3 cut scores for science demark the minimum level of achievement considered to be proficient for accountability purposes.

MAP Growth tests are adaptive interim assessments aligned to state-specific content standards and administered in the fall, winter, and spring. Scores are reported on the RIT vertical scale with a range of 100 to 350. NWEA conducts norming studies of student and school performance on MAP Growth assessments to aid the interpretation of scores. Growth norms provide expected score gains for a test from term to term, such as from fall to spring terms. The most recent norms study was conducted in 2025 (NWEA, 2025).

2. Methods

2.1. Data Collection

This linking study is based on data from the Spring 2022 administrations of the MAP Growth and NJSLA. NWEA requested that New Jersey districts recruited to participate in the study share their student and score data for the target term. Districts also permitted NWEA to access their students' MAP Growth scores from the NWEA in-house database. Once state score information was available to NWEA, each student's state testing record was matched to their MAP Growth score based on the student's first and last names, date of birth, student ID, and other available identifying information. Only students who took both the MAP Growth and NJSLA in Spring 2022 were included in the study sample.

2.2. Post-Stratification Weighting

Post-stratification weights were applied to the calculations to ensure that the linking study sample represented the state's test-taking student population in terms of race, sex, and performance level. These variables were selected because they are known to be correlated with students' academic achievement and are often available in state summative assessment reports. The weighted sample will match the target population as closely as possible for the key demographics and performance characteristics as defined by the state.

A raking procedure was used to calculate the post-stratification weights that either compensate for the underrepresentation of certain groups or attenuate the overrepresentation of certain groups. Raking uses iterative procedures to obtain weights that match sample marginal distributions to known population margins. The following steps were taken during this process:

1. Calculate marginal distributions of race, sex, and performance level for the sample and population.
2. Calculate post-stratification weights with the rake function from the survey package in R (Lumley, 2019).
3. Apply the weights to the sample before conducting the linking study analyses.

2.3. Descriptive Statistics

Descriptive statistics are provided to summarize the test scores for both the MAP Growth and NJSLA, including the test score mean, standard deviation (SD), minimum, and maximum. The mean presents the average test scores across all students in the study sample, and the SD indicates the variability of test scores, revealing how students' scores are distributed around the average score, or mean. Correlation coefficients between the MAP Growth RIT scores and NJLSA scores are also provided to answer the question "How well do the test scores from MAP Growth (that reference the RIT scale) correlate to the scores obtained from the NJLSA tests (that reference some other scale) in the same subject?" The correlations were calculated as:

$$r = \frac{\sum (x_i - \overline{x})(y_i - \overline{y})}{\sqrt{\sum (x_i - \overline{x})^2 \sum (y_i - \overline{y})^2}}$$

where r is the correlation coefficient, x_i and y_i are the values of the *x*- and *y*-variables in a sample, and $\overline{x}$ and $\overline{y}$ are the mean of the values of the *x*- and *y*-variables.

2.4. MAP Growth Cut Scores

MAP Growth cut scores that predict student achievement on the NJSLA assessments are reported for grades 3–8, as well as for grade 2 so that educators can track early learners' progress toward proficiency on the NJSLA test by grade 3. Percentile ranks based on the 2025 NWEA norms are also provided. These are useful for understanding how students' scores compare with peers nationwide and the relative rigor of a state's performance level designations for its summative assessment.

The equipercentile linking method (Kolen & Brennan, 2004) was used to identify the spring MAP Growth RIT scores for grades 3–8 that correspond to the spring NJSLA performance level cut scores. The equipercentile linking procedure matches scores on the two scales that have the same percentile rank (i.e., the proportion of tests at or below each score). For example, let x represent a score on Test X (e.g., NJSLA). Its equipercentile equivalent score on Test Y (e.g., MAP Growth), $e_y(x)$, can be obtained through a cumulative-distribution-based linking function defined as:

$$e_y(x) = G^{-1}[P(x)]$$

where $e_y(x)$ is the equipercentile equivalent of score x on the NJSLA tests on the scale of MAP Growth, $P(x)$ is the percentile rank of a given score on the NJSLA tests, and G^{-1} is the inverse of the percentile rank function for MAP Growth that indicates the score on MAP Growth corresponding to a given percentile. Polynomial loglinear pre-smoothing was applied to reduce irregularities of the score distributions and equipercentile linking curve.

The MAP Growth conditional growth norms provide students' expected score gains across terms, such as growth from fall to spring within the same grade or from spring of a lower grade to spring of the adjacent higher grade. This information was used to calculate the fall and winter cut scores for grades 3–8. The equation below was used to determine the previous term's MAP Growth score needed to reach the spring cut score, considering the expected growth associated with the previous RIT score:

$$RIT_{PredSpring} = RIT_{previous} + g$$

where:

- $RIT_{PredSpring}$ is the predicted MAP Growth spring score,
- $RIT_{previous}$ is the previous term's RIT score, and
- g is the expected growth from the previous RIT (e.g., fall or winter) to the spring RIT score.

The most recent MAP Growth conditional growth norms were also used to calculate the fall, winter, and spring cuts for grade 2. Students do not begin taking the NJSLA summative assessment until grade 3. Thus, to derive the spring cut scores for grade 2, the growth score from spring of one year to the next was used (i.e., the growth score from spring of grade 2 to spring of grade 3). The calculation of fall and winter cuts for grade 2 followed the same process as for the other grades. For example, the growth score from fall to spring in grade 2 was used to calculate the fall cuts for this grade.

2.5. Classification Accuracy

The degree to which MAP Growth predicts student proficiency status on the NJSLA tests can be described using classification accuracy statistics based on the MAP Growth spring RIT cut scores. The results show the proportion of students correctly classified by their RIT scores as proficient (Level 4 or higher for mathematics and ELA/reading and Level 3 or higher for science) or not proficient (lower than Level 4 for mathematics and ELA/reading and lower than Level 3 for science) on the NJSLA tests. Table 2.1 describes the classification accuracy statistics provided in this report (Pommerich et al., 2004).

Table 2.1. Description of Classification Accuracy Summary Statistics

Statistic	Description	Interpretation
Overall Classification Accuracy Rate	(TP + TN) / (total sample size)	Proportion of the study sample whose proficiency classification on the state test was correctly predicted by MAP Growth cut scores
False Negative (FN) Rate	FN / (FN + TP)	Proportion of students identified by MAP Growth as not proficient in those observed as proficient on the state test
False Positive (FP) Rate	FP / (FP + TN)	Proportion of students identified by MAP Growth as not proficient in those observed as not proficient on the state test
Sensitivity	TP / (TP + FN)	Proportion of students identified by MAP Growth as proficient in those observed as such on the state test
Specificity	TN / (TN + FP)	Proportion of students identified by MAP Growth as not proficient in those observed as such on the state test
Precision	TP / (TP + FP)	Proportion of students observed as proficient on the state test in those identified as such by the MAP Growth test
Area Under the Curve (AUC)	Area under the receiver operating characteristics (ROC) curve	How well MAP Growth cut scores separate the study sample into proficiency categories that match those from the state test cut scores. An AUC at or above 0.80 is considered “good” accuracy.

Note. FP = false positives; FN = false negatives; TP = true positives; TN = true negatives.

2.6. Proficiency Projections

Given that all test scores contain measurement errors, reaching the accountability RIT cut does not guarantee that the student is proficient on the state test. Instead, it can be claimed that a student meeting the RIT cut score has a 50% chance of reaching proficiency (Level 4 or higher for mathematics and ELA/reading and Level 3 or higher for science) on the state test, with their chances increasing the greater their score is from the cut. The proficiency projections indicate these probabilities for various RIT scores throughout the year.

In addition to calculating the MAP Growth fall and winter cut scores (and the projected grade 2 cut scores), the MAP Growth conditional growth norms data were also used to calculate the probability of reaching proficiency on the NJSLA test in the spring based on a student’s RIT scores from fall and winter:

$$Pr(Achieving\ proficiency\ in\ spring|\ starting\ RIT) = \Phi\left(\frac{RIT_{previous} + g - RIT_{SpringCut}}{SD}\right)$$

where:

- Φ is the standard normal cumulative distribution function,
- $RIT_{previous}$ is the student's RIT score in fall or winter,
- g is the expected growth from the previous RIT (e.g., fall or winter) to the spring RIT,
- $RIT_{SpringCut}$ is the MAP Growth cut score associated with state proficiency in spring, and
- SD is the conditional standard deviation of the expected growth, g.

The equation below was used to estimate the probability of a student achieving proficiency on the NJSLA tests based on their spring RIT score (RIT_{Spring}):

$$Pr(Achieving\ proficiency\ in\ spring \mid spring\ RIT) = \Phi\left(\frac{RIT_{Spring} - RIT_{SpringCut}}{SE}\right)$$

where SE is the standard error of measurement for MAP Growth.

3. Results

3.1. Study Sample

Only students who have scores on both the MAP Growth and NJSLA tests in Spring 2022 for the target subjects were included in the sample. Data were collected from 12 districts and 76 schools in New Jersey. Table 3.1 presents the distributions of student race, sex, and performance level in the original unweighted study sample. Table 3.2 presents the distributions of the target population of students who took the NJSLA tests. Since the original study sample is different from the target NJSLA population, post-stratification weights were applied. Table 3.3 presents the demographic distributions of the final analytic sample after weighting, which are almost identical to the NJSLA student population distributions.

Table 3.1. Linking Study Sample Demographics (Unweighted)

Demographic Subgroup		% Students by Grade					
		3	4	5	6	7	8
Mathematics							
	Total N	3,863	4,031	3,915	3,988	4,619	4,495
Race	African American	26.3	26.3	25.0	26.4	24.9	27.2
	American Indian	0.3	0.2	0.2	0.2	0.2	0.2
	Asian	1.4	1.2	1.3	1.5	1.4	1.5
	Hispanic	53.1	53.9	54.2	54.8	49.8	49.4
	NHPI	0.3	0.4	0.2	0.2	0.2	0.2
	Other	1.9	1.7	1.5	1.3	1.2	1.1
	White	16.7	16.3	17.7	15.6	22.4	20.4
Sex	Female	49.5	50.5	50.7	49.2	48.3	49.0
	Male	50.5	49.5	49.3	50.8	51.7	51.0
Performance Level	Level 1	26.4	26.8	28.1	25.3	16.6	34.8
	Level 2	28.7	33.8	33.2	33.8	31.8	30.8
	Level 3	23.2	22.8	23.5	26.6	31.5	19.6
	Level 4	18.5	15.4	13.6	13.0	17.8	14.0
	Level 5	3.3	1.2	1.5	1.3	2.2	0.8
ELA/Reading							
	Total N	3,812	3,988	3,851	3,886	4,620	4,884
Race	African American	26.4	26.7	25.2	26.6	24.5	26.6
	American Indian	0.3	0.2	0.2	0.2	0.2	0.3
	Asian	1.4	1.2	1.2	1.5	1.5	1.7
	Hispanic	53.9	54.1	54.6	55.1	50.7	48.3
	NHPI	0.3	0.4	0.2	0.2	0.2	0.2
	Other	1.9	1.7	1.6	1.4	1.1	1.1
	White	15.8	15.7	17.0	15.1	21.9	21.9
Sex	Female	49.5	50.2	50.8	48.9	48.3	49.4
	Male	50.5	49.8	49.2	51.1	51.7	50.6

Demographic Subgroup		% Students by Grade					
		3	4	5	6	7	8
Performance Level	Level 1	35.9	29.1	24.4	17.2	18.1	21.0
	Level 2	20.4	21.5	21.7	22.2	18.6	18.5
	Level 3	20.5	23.1	24.8	29.6	25.9	24.3
	Level 4	21.1	22.5	26.0	26.6	28.1	30.0
	Level 5	2.1	3.8	3.1	4.4	9.3	6.2
Science							
	Total N	–	–	3,513	–	–	3,948
Race	African American	–	–	25.3	–	–	29.4
	American Indian	–	–	0.1	–	–	0.2
	Asian	–	–	1.0	–	–	0.7
	Hispanic	–	–	66.9	–	–	63.2
	NHPI	–	–	0.1	–	–	0.2
	Other	–	–	0.1	–	–	0.0
	White	–	–	6.3	–	–	6.3
Sex	Female	–	–	51.0	–	–	50.0
	Male	–	–	49.0	–	–	50.0
Performance Level	Level 1	–	–	68.0	–	–	62.9
	Level 2	–	–	24.5	–	–	33.5
	Level 3	–	–	5.9	–	–	3.3
	Level 4	–	–	1.5	–	–	0.3

Note. NHPI = Native Hawaiian or Other Pacific Islander.

Table 3.2. Spring 2022 NJSLA Student Population Demographics

Demographic Subgroup		% Students by Grade					
		3	4	5	6	7	8
Mathematics							
	Total N	93,502	94,953	96,601	97,548	95,341	66,241
Race	African American	14.3	14.9	14.4	14.7	15.5	18.1
	American Indian	0.2	0.2	0.2	0.2	0.1	0.2
	Asian	10.8	11.1	10.8	10.8	8.6	5.0
	Hispanic	33.0	32.3	32.3	31.8	32.8	36.7
	NHPI	0.2	0.2	0.2	0.2	0.2	0.2
	Other	3.4	3.2	2.9	2.9	2.6	2.2
	White	38.2	38.2	39.1	39.5	40.3	37.6
Sex	Female	49.3	49.1	49.0	48.9	48.6	47.8
	Male	50.7	50.9	51.0	51.1	51.4	52.2

Demographic Subgroup		% Students by Grade					
		3	4	5	6	7	8
Performance Level	Level 1	13.3	13.1	15.1	15.3	10.9	30.4
	Level 2	18.3	22.6	23.0	24.9	23.6	31.9
	Level 3	23.0	24.8	25.9	28.5	31.5	22.3
	Level 4	32.8	33.2	28.9	26.0	28.9	14.6
	Level 5	12.6	6.2	7.1	5.3	5.1	0.8
ELA/Reading							
	Total N	92,131	93,632	95,314	96,334	99,427	100,781
Race	African American	14.5	15.0	14.6	14.9	15.1	15.1
	American Indian	0.2	0.2	0.2	0.2	0.1	0.1
	Asian	10.8	11.1	10.9	10.8	10.6	10.7
	Hispanic	32.3	31.7	31.7	31.1	31.0	30.7
	NHPI	0.2	0.2	0.2	0.2	0.2	0.2
	Other	3.4	3.2	3.0	2.9	2.6	2.5
	White	38.6	38.6	39.5	39.9	40.4	40.8
Sex	Female	49.3	49.1	48.9	48.9	48.5	48.7
	Male	50.7	50.9	51.1	51.1	51.5	51.3
Performance Level	Level 1	20.1	14.4	12.5	10.6	12.3	14.3
	Level 2	15.5	14.3	14.7	15.6	13.5	13.2
	Level 3	22.0	21.9	23.2	26.3	21.5	21.2
	Level 4	36.2	35.3	40.4	37.4	31.4	35.8
	Level 5	6.2	14.1	9.2	10.2	21.3	15.6
Science							
	Total N	–	–	96,288	–	–	101,371
Race	African American	–	–	14.4	–	–	14.8
	American Indian	–	–	0.2	–	–	0.1
	Asian	–	–	10.8	–	–	10.6
	Hispanic	–	–	32.4	–	–	31.4
	NHPI	–	–	0.2	–	–	0.2
	Other	–	–	2.9	–	–	2.4
	White	–	–	39.1	–	–	40.4
Sex	Female	–	–	49.0	–	–	48.8
	Male	–	–	51.0	–	–	51.2
Performance Level	Level 1	–	–	41.6	–	–	40.9
	Level 2	–	–	32.9	–	–	43.5
	Level 3	–	–	18.2	–	–	12.0
	Level 4	–	–	7.4	–	–	3.6

Note. NHPI = Native Hawaiian or Other Pacific Islander.

Table 3.3. Linking Study Sample Demographics (Weighted)

Demographic Subgroup		% Students by Grade					
		3	4	5	6	7	8
Mathematics							
	Total N	3,863	4,027	3,915	3,988	4,619	4,495
Race	African American	14.3	14.8	14.4	14.7	15.5	18.1
	American Indian	0.2	0.2	0.2	0.2	0.1	0.2
	Asian	10.8	11.1	10.8	10.8	8.6	5.0
	Hispanic	33.0	32.3	32.3	31.8	32.8	36.7
	NHPI	0.2	0.2	0.2	0.2	0.2	0.2
	Other	3.4	3.2	2.9	2.9	2.6	2.2
	White	38.2	38.2	39.1	39.5	40.3	37.6
Sex	Female	49.3	49.1	49.0	48.9	48.6	47.8
	Male	50.7	50.9	51.0	51.1	51.4	52.2
Performance Level	Level 1	13.3	13.1	15.1	15.3	10.9	30.4
	Level 2	18.3	22.6	23.0	24.9	23.6	31.9
	Level 3	23.0	24.8	25.9	28.5	31.5	22.3
	Level 4	32.8	33.2	28.9	26.0	28.9	14.6
	Level 5	12.6	6.2	7.1	5.3	5.1	0.8
ELA/Reading							
	Total N	3,812	3,988	3,851	3,890	4,620	4,889
Race	African American	14.5	15.0	14.6	14.9	15.1	15.1
	American Indian	0.2	0.2	0.2	0.2	0.1	0.1
	Asian	10.8	11.1	10.9	10.8	10.6	10.7
	Hispanic	32.3	31.7	31.7	31.1	31.0	30.7
	NHPI	0.2	0.2	0.2	0.2	0.2	0.2
	Other	3.4	3.2	3.0	2.9	2.6	2.5
	White	38.6	38.6	39.5	39.9	40.4	40.8
Sex	Female	49.3	49.1	48.9	48.9	48.5	48.7
	Male	50.7	50.9	51.1	51.1	51.5	51.3
Performance Level	Level 1	20.1	14.4	12.5	10.6	12.3	14.3
	Level 2	15.5	14.3	14.7	15.6	13.5	13.2
	Level 3	22.0	21.9	23.2	26.3	21.5	21.2
	Level 4	36.2	35.3	40.4	37.4	31.4	35.8
	Level 5	6.2	14.1	9.2	10.2	21.3	15.6
Science							
	Total N	–	–	3,517	–	–	3,948
Race	African American	–	–	14.4	–	–	14.8
	American Indian	–	–	0.2	–	–	0.1
	Asian	–	–	10.8	–	–	10.6
	Hispanic	–	–	32.4	–	–	31.4
	NHPI	–	–	0.2	–	–	0.2

Demographic Subgroup		% Students by Grade					
		3	4	5	6	7	8
	Other	–	–	2.9	–	–	2.4
	White	–	–	39.1	–	–	40.4
Sex	Female	–	–	49.0	–	–	48.8
	Male	–	–	51.0	–	–	51.2
Performance Level	Level 1	–	–	41.6	–	–	40.9
	Level 2	–	–	32.9	–	–	43.5
	Level 3	–	–	18.2	–	–	12.0
	Level 4	–	–	7.4	–	–	3.6

Note. NHPI = Native Hawaiian or Other Pacific Islander.

3.2. Descriptive Statistics

Table 3.4 presents descriptive statistics of the MAP Growth and NJSLA test scores from Spring 2022, including the correlation coefficients (*r*) between them. The correlations between the scores range from 0.76 to 0.88 for mathematics, 0.78 to 0.81 for ELA/reading, and 0.80 to 0.84 for science. These values indicate a high positive correlation among the scores, which is important validity evidence for the claim that MAP Growth scores are good predictors of performance on the NJSLA.

Table 3.4. Descriptive Statistics of Test Scores

Grade	N	*r*	NJSLA				MAP Growth			
			Mean	SD	Min.	Max.	Mean	SD	Min.	Max.
Mathematics										
3	3,863	0.86	743.8	39.4	650	850	199.5	16.4	129	247
4	4,027	0.88	738.2	34.6	650	836	207.4	17.3	139	256
5	3,915	0.88	734.8	34.6	650	836	215.2	19.6	128	271
6	3,988	0.88	732.6	33.2	650	850	219.4	18.0	152	266
7	4,619	0.88	736.8	29.4	650	845	224.0	19.2	155	276
8	4,495	0.76	716.2	32.9	650	850	221.5	19.2	143	280
ELA/reading										
3	3,812	0.81	738.4	44.9	650	850	195.4	17.2	139	240
4	3,988	0.81	744.5	37.9	650	842	203.8	17.0	144	241
5	3,851	0.80	746.4	37.2	650	850	208.6	16.7	144	248
6	3,890	0.80	745.0	34.7	650	850	212.5	16.6	156	264
7	4,620	0.78	748.8	40.2	650	850	216.3	17.6	149	256
8	4,889	0.78	748.5	42.8	650	850	218.7	18.0	158	259
Science										
5	3,517	0.84	160.4	49.0	100	300	202.2	15.6	152	245
8	3,948	0.80	158.3	33.1	100	274	209.4	16.0	161	247

Note. SD = standard deviation; Min. = minimum; Max. = maximum.

3.3. MAP Growth Cut Scores

Table 3.5 to Table 3.7 present the NJSLA scale score ranges and the corresponding MAP Growth RIT cut scores and percentile ranges by content area and grade. Bold numbers indicate the cut scores considered to be at least proficient for accountability purposes. These tables can be used to predict a student's likely performance level on the NJSLA spring tests when MAP Growth is taken in the fall, winter, or spring. For example, a grade 3 student who obtained a MAP Growth mathematics RIT score of 190 in the fall is likely to achieve Level 4 performance on the NJSLA mathematics test. The same is true for a grade 3 student who obtained a MAP Growth mathematics RIT score of 199 in the winter. The winter cut score is higher than the fall cut score because of expected growth during the school year as students receive more instruction.

Within this report, the cut scores for fall and winter are derived from the spring cuts and the typical growth scores from fall-to-spring or winter-to-spring. The typical growth scores are based on the default instructional weeks most encountered for each term (Weeks 4, 20, and 32 for fall, winter, and spring, respectively). Since instructional weeks often vary by district, the cut scores in this report may differ slightly from the MAP Growth score reports that reflect instructional weeks set by partners. If the actual instructional weeks deviate substantially from the default ones, a student's expected performance level could be different from the projections presented in this report. Partners are therefore encouraged to use the projected performance level in students' score reports since they reflect the specific instructional weeks set by partners.

Table 3.5. MAP Growth Cut Scores—Mathematics

NJSLA Mathematics					
Grade	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
3	650–699	700–724	725–749	**750**–789	790–850
4	650–699	700–724	725–749	**750**–795	796–850
5	650–699	700–724	725–749	**750**–789	790–850
6	650–699	700–724	725–749	**750**–787	788–850
7	650–699	700–724	725–749	**750**–785	786–850
8	650–699	700–724	725–749	**750**–800	801–850

MAP Growth Mathematics										
Grade	**Level 1**		**Level 2**		**Level 3**		**Level 4**		**Level 5**	
	RIT	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**
Fall										
2	100–151	1–8	152–167	9–37	168–178	38–64	**179**–199	65–95	200–350	96–99
3	100–168	1–16	169–180	17–41	181–189	42–64	**190**–206	65–92	207–350	93–99
4	100–177	1–11	178–192	12–39	193–205	40–70	**206**–226	71–96	227–350	97–99
5	100–188	1–13	189–202	14–41	203–216	42–74	**217**–237	75–96	238–350	97–99
6	100–193	1–15	194–208	16–46	209–220	47–74	**221**–241	75–97	242–350	98–99
7	100–198	1–14	199–212	15–39	213–228	40–74	**229**–249	75–96	250–350	97–99
8	100–210	1–26	211–224	27–55	225–237	56–80	**238**–260	81–97	261–350	98–99
Winter										
2	100–160	1–9	161–175	10–36	176–186	37–63	**187**–207	64–95	208–350	96–99
3	100–176	1–16	177–188	17–40	189–198	41–64	**199**–215	65–91	216–350	92–99
4	100–184	1–12	185–199	13–39	200–213	40–70	**214**–234	71–95	235–350	96–99
5	100–192	1–13	193–208	14–43	209–222	44–73	**223**–244	74–96	245–350	97–99
6	100–198	1–15	199–214	16–47	215–227	48–75	**228**–248	76–96	249–350	97–99
7	100–200	1–13	201–216	14–40	217–233	41–75	**234**–254	76–96	255–350	97–99
8	100–214	1–28	215–228	29–55	229–242	56–80	**243**–266	81–97	267–350	98–99
Spring										
2	100–168	1–12	169–182	13–38	183–192	39–62	**193**–211	63–93	212–350	94–99
3	100–183	1–18	184–195	19–42	196–204	43–63	**205**–220	64–89	221–350	90–99
4	100–190	1–14	191–205	15–40	206–218	41–68	**219**–239	69–94	240–350	95–99

MAP Growth Mathematics										
Grade	Level 1		Level 2		Level 3		Level 4		Level 5	
	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile
5	100–197	1–15	198–212	16–43	213–226	44–71	**227**–248	72–95	249–350	96–99
6	100–203	1–18	204–218	19–46	219–231	47–73	**232**–252	74–95	253–350	96–99
7	100–204	1–15	205–219	16–41	220–235	42–73	**236**–256	74–95	257–350	96–99
8	100–217	1–28	218–231	29–55	232–244	56–78	**245**–267	79–96	268–350	97–99

Note. Bold numbers indicate the cut scores considered to be at least proficient for accountability purposes.

Table 3.6. MAP Growth Cut Scores—ELA/Reading

NJSLA ELA/Reading										
Grade	**Level 1**		**Level 2**		**Level 3**		**Level 4**		**Level 5**	
3	650–699		700–724		725–749		**750**–809		810–850	
4	650–699		700–724		725–749		**750**–789		790–850	
5	650–699		700–724		725–749		**750**–798		799–850	
6	650–699		700–724		725–749		**750**–789		790–850	
7	650–699		700–724		725–749		**750**–784		785–850	
8	650–699		700–724		725–749		**750**–793		794–850	
MAP Growth Reading										
Grade	**Level 1**		**Level 2**		**Level 3**		**Level 4**		**Level 5**	
	RIT	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**
Fall										
2	100–154	1–18	155–167	19–44	168–179	45–71	**180**–205	72–97	206–350	98–99
3	100–172	1–25	173–183	26–47	184–192	48–67	**193**–214	68–94	215–350	95–99
4	100–176	1–14	177–188	15–34	189–201	35–62	**202**–219	63–90	220–350	91–99
5	100–180	1–9	181–194	10–30	195–206	31–57	**207**–227	58–91	228–350	92–99
6	100–183	1–6	184–199	7–29	200–212	30–59	**213**–229	60–88	230–350	89–99
7	100–191	1–10	192–202	11–28	203–214	29–55	**215**–230	56–86	231–350	87–99
8	100–195	1–11	196–207	12–32	208–218	33–57	**219**–233	58–85	234–350	86–99
Winter										
2	100–161	1–19	162–174	20–45	175–185	46–70	**186**–211	71–97	212–350	98–99
3	100–178	1–26	179–188	27–47	189–197	48–66	**198**–218	67–94	219–350	95–99
4	100–180	1–14	181–192	15–35	193–204	36–61	**205**–221	62–89	222–350	90–99
5	100–183	1–9	184–197	10–30	198–208	31–55	**209**–228	56–90	229–350	91–99
6	100–186	1–7	187–201	8–29	202–214	30–59	**215**–230	60–88	231–350	89–99
7	100–193	1–11	194–204	12–29	205–215	30–54	**216**–231	55–85	232–350	86–99
8	100–197	1–12	198–208	13–31	209–219	32–56	**220**–234	57–85	235–350	86–99
Spring										
2	100–168	1–22	169–179	23–45	180–189	46–67	**190**–212	68–95	213–350	96–99
3	100–183	1–28	184–192	29–47	193–200	48–64	**201**–219	65–92	220–350	93–99
4	100–185	1–17	186–195	18–36	196–206	37–60	**207**–222	61–87	223–350	88–99

MAP Growth Reading										
Grade	Level 1		Level 2		Level 3		Level 4		Level 5	
	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile
5	100–188	1–12	189–200	13–32	201–210	33–55	**211**–229	56–89	230–350	90–99
6	100–190	1–9	191–203	10–30	204–215	31–58	**216**–231	59–87	232–350	88–99
7	100–196	1–14	197–206	15–31	207–216	32–54	**217**–232	55–85	233–350	86–99
8	100–200	1–15	201–210	16–34	211–220	35–56	**221**–235	57–85	236–350	86–99

Note. Bold numbers indicate the cut scores considered to be at least proficient for accountability purposes.

Table 3.7. MAP Growth Cut Scores—Science

NJSLA Science								
Grade	**Level 1**		**Level 2**		**Level 3**		**Level 4**	
5	100–149		150–199		**200**–242		243–300	
8	100–149		150–199		**200**–230		231–300	
MAP Growth Science								
Grade	**Level 1**		**Level 2**		**Level 3**		**Level 4**	
	RIT	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**
Fall								
5	100–196	1–37	197–206	38–67	**207**–222	68–94	223–350	95–99
8	100–202	1–31	203–226	32–88	**227**–236	89–96	237–350	97–99
Winter								
5	100–199	1–37	200–209	38–66	**210**–224	67–93	225–350	94–99
8	100–204	1–32	205–227	33–86	**228**–237	87–96	238–350	97–99
Spring								
5	100–202	1–39	203–211	40–64	**212**–225	65–91	226–350	92–99
8	100–206	1–34	207–228	35–85	**229**–238	86–95	239–350	96–99

Note. Bold numbers indicate the cut scores considered to be at least proficient for accountability purposes.

3.4. Classification Accuracy

Table 3.8 presents the classification accuracy summary statistics, including the overall classification accuracy rates. These results indicate how well MAP Growth spring RIT scores predict proficiency on the NJSLA tests, providing insight into the predictive validity of MAP Growth. The overall classification accuracy rates range from 0.87 to 0.91 for mathematics, 0.80 to 0.83 for ELA/reading, and 0.89 or 0.93 for science. These values suggest that the RIT cut scores are good at classifying students as proficient (Level 4 or higher for mathematics and ELA/reading and Level 3 or higher for science) or not proficient (lower than Level 4 for mathematics and ELA/reading and lower than Level 3 for science) on the NJSLA test.

Although the results show that MAP Growth scores can be used to predict student proficiency with relatively high accuracy on the NJSLA tests, there is a notable limitation to how these results should be used and interpreted. The NJSLA and MAP Growth assessments are designed for different purposes and measure slightly different constructs even within the same content area. Therefore, scores on the two tests cannot be assumed to be interchangeable. MAP Growth may not be used as a substitute for the state tests and vice versa.

Table 3.8. Classification Accuracy Results

Grade	N	Cut Score		Class. Accuracy	Rate		Sensitivity	Specificity	Precision	AUC
		MAP Growth	NJSLA		FP	FN				
Mathematics										
3	3,863	203	750	0.87	0.14	0.12	0.88	0.86	0.84	0.94
4	4,027	214	750	0.87	0.10	0.18	0.82	0.90	0.85	0.95
5	3,915	224	750	0.89	0.07	0.17	0.83	0.93	0.87	0.96
6	3,988	229	750	0.90	0.08	0.14	0.86	0.92	0.82	0.96
7	4,619	234	750	0.89	0.07	0.18	0.82	0.93	0.86	0.96
8	4,495	241	750	0.91	0.05	0.29	0.71	0.95	0.71	0.95
ELA/Reading										
3	3,812	201	750	0.82	0.17	0.19	0.81	0.83	0.78	0.91
4	3,988	207	750	0.83	0.17	0.17	0.83	0.83	0.82	0.91
5	3,851	211	750	0.82	0.20	0.16	0.84	0.80	0.80	0.90
6	3,890	216	750	0.82	0.18	0.19	0.81	0.82	0.80	0.90
7	4,620	217	750	0.80	0.24	0.16	0.84	0.76	0.80	0.89
8	4,889	221	750	0.80	0.21	0.19	0.81	0.79	0.80	0.89
Science										
5	3,517	212	200	0.89	0.10	0.13	0.87	0.90	0.75	0.94
8	3,948	229	200	0.93	0.02	0.32	0.68	0.98	0.84	0.96

Note. Class. Accuracy = overall classification accuracy rate; FP = false positives; FN = false negatives; AUC = area under the ROC curve.

3.5. Proficiency Projections

Table 3.9 to Table 3.11 present the estimated probability of achieving proficiency (Level 4 or higher for mathematics and ELA/reading and Level 3 or higher for science) on the NJSLA test based on RIT scores from fall, winter, or spring. Due to measurement error in all test scores, these accountability MAP Growth cuts do not guarantee that a student will reach proficiency on the NJSLA. Instead, they indicate a 50% chance that a student will reach a particular performance level. Therefore, these projections further elucidate the accountability cut scores by providing the likelihood of reaching proficiency on the NJSLA in the spring at a given percentile throughout the year. For example, a grade 3 student at percentile 80 who obtained a MAP Growth mathematics score of 197 in the fall has an 81% chance of reaching proficiency on the NJSLA test in spring. Additionally, an educator can also use the table to estimate that a grade 3 student who obtained a MAP Growth mathematics score of 210 in the winter has a 92% probability of reaching proficiency on the NJSLA summative assessment.

Table 3.9. Proficiency Projections Based on RIT Scores—Mathematics

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 4	Prob.		Level 4	Prob.		Level 4	Prob.
2	5	193	147	No	<0.01	155	No	<0.01	161	No	<0.01
	10	193	153	No	<0.01	161	No	<0.01	167	No	<0.01
	15	193	157	No	0.01	165	No	<0.01	171	No	<0.01
	20	193	160	No	0.02	168	No	0.01	174	No	<0.01
	25	193	162	No	0.03	171	No	0.02	177	No	<0.01
	30	193	165	No	0.06	173	No	0.04	179	No	<0.01
	35	193	167	No	0.09	175	No	0.07	181	No	<0.01
	40	193	169	No	0.14	177	No	0.12	183	No	<0.01
	45	193	171	No	0.2	179	No	0.14	185	No	0.01
	50	193	173	No	0.27	181	No	0.21	187	No	0.04
	55	193	175	No	0.31	183	No	0.3	189	No	0.13
	60	193	177	No	0.4	185	No	0.4	192	No	0.39
	65	193	179	Yes	0.5	187	Yes	0.5	194	Yes	0.61
	70	193	181	Yes	0.6	189	Yes	0.55	196	Yes	0.8
	75	193	183	Yes	0.69	192	Yes	0.7	198	Yes	0.92
	80	193	186	Yes	0.77	194	Yes	0.79	201	Yes	0.99
	85	193	189	Yes	0.86	197	Yes	0.88	204	Yes	>0.99
	90	193	193	Yes	0.93	201	Yes	0.94	208	Yes	>0.99
	95	193	198	Yes	0.98	207	Yes	0.99	214	Yes	>0.99
3	5	205	158	No	<0.01	166	No	<0.01	171	No	<0.01
	10	205	164	No	<0.01	172	No	<0.01	177	No	<0.01
	15	205	168	No	<0.01	176	No	<0.01	181	No	<0.01
	20	205	171	No	0.01	179	No	<0.01	185	No	<0.01
	25	205	174	No	0.02	182	No	0.01	188	No	<0.01
	30	205	176	No	0.04	184	No	0.03	190	No	<0.01
	35	205	178	No	0.06	186	No	0.05	193	No	<0.01
	40	205	180	No	0.1	189	No	0.11	195	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 4	Prob.		Level 4	Prob.		Level 4	Prob.
	45	205	182	No	0.15	191	No	0.17	197	No	0.01
	50	205	184	No	0.22	193	No	0.2	199	No	0.04
	55	205	186	No	0.3	195	No	0.29	201	No	0.13
	60	205	188	No	0.4	197	No	0.39	203	No	0.28
	65	205	190	Yes	0.5	199	Yes	0.5	206	Yes	0.61
	70	205	192	Yes	0.6	201	Yes	0.61	208	Yes	0.8
	75	205	195	Yes	0.74	204	Yes	0.76	211	Yes	0.96
	80	205	197	Yes	0.81	206	Yes	0.83	213	Yes	0.99
	85	205	200	Yes	0.9	210	Yes	0.92	217	Yes	>0.99
	90	205	204	Yes	0.96	214	Yes	0.97	221	Yes	>0.99
	95	205	210	Yes	0.99	220	Yes	>0.99	227	Yes	>0.99
4	5	219	171	No	<0.01	176	No	<0.01	180	No	<0.01
	10	219	177	No	<0.01	183	No	<0.01	187	No	<0.01
	15	219	181	No	<0.01	187	No	<0.01	191	No	<0.01
	20	219	184	No	<0.01	190	No	<0.01	195	No	<0.01
	25	219	186	No	0.01	193	No	<0.01	198	No	<0.01
	30	219	189	No	0.02	196	No	0.01	201	No	<0.01
	35	219	191	No	0.03	198	No	0.02	203	No	<0.01
	40	219	193	No	0.05	200	No	0.03	206	No	<0.01
	45	219	195	No	0.09	202	No	0.06	208	No	<0.01
	50	219	197	No	0.13	204	No	0.1	210	No	0.01
	55	219	199	No	0.19	207	No	0.2	212	No	0.02
	60	219	201	No	0.27	209	No	0.24	215	No	0.13
	65	219	203	No	0.35	211	No	0.33	217	No	0.28
	70	219	205	No	0.45	213	No	0.44	220	Yes	0.61
	75	219	208	Yes	0.6	216	Yes	0.61	222	Yes	0.8
	80	219	210	Yes	0.69	219	Yes	0.76	225	Yes	0.96
	85	219	214	Yes	0.84	222	Yes	0.87	229	Yes	>0.99

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 4	Prob.		Level 4	Prob.		Level 4	Prob.
	90	219	217	Yes	0.91	226	Yes	0.96	233	Yes	>0.99
	95	219	223	Yes	0.98	232	Yes	0.99	240	Yes	>0.99
5	5	227	180	No	<0.01	183	No	<0.01	186	No	<0.01
	10	227	185	No	<0.01	189	No	<0.01	192	No	<0.01
	15	227	189	No	<0.01	194	No	<0.01	197	No	<0.01
	20	227	193	No	<0.01	197	No	<0.01	200	No	<0.01
	25	227	195	No	<0.01	200	No	<0.01	204	No	<0.01
	30	227	198	No	0.01	203	No	<0.01	206	No	<0.01
	35	227	200	No	0.01	205	No	0.01	209	No	<0.01
	40	227	202	No	0.03	207	No	0.01	211	No	<0.01
	45	227	204	No	0.05	210	No	0.03	214	No	<0.01
	50	227	206	No	0.08	212	No	0.06	216	No	<0.01
	55	227	208	No	0.12	214	No	0.1	218	No	0.01
	60	227	210	No	0.19	216	No	0.16	221	No	0.04
	65	227	212	No	0.26	219	No	0.28	223	No	0.13
	70	227	215	No	0.4	221	No	0.39	226	No	0.39
	75	227	217	Yes	0.5	224	Yes	0.56	228	Yes	0.61
	80	227	220	Yes	0.65	226	Yes	0.67	232	Yes	0.92
	85	227	223	Yes	0.78	230	Yes	0.84	235	Yes	0.99
	90	227	227	Yes	0.9	234	Yes	0.94	240	Yes	>0.99
	95	227	233	Yes	0.99	240	Yes	0.99	246	Yes	>0.99
6	5	232	184	No	<0.01	187	No	<0.01	190	No	<0.01
	10	232	190	No	<0.01	194	No	<0.01	197	No	<0.01
	15	232	194	No	<0.01	198	No	<0.01	201	No	<0.01
	20	232	197	No	<0.01	201	No	<0.01	205	No	<0.01
	25	232	199	No	<0.01	204	No	<0.01	208	No	<0.01
	30	232	202	No	0.01	207	No	<0.01	211	No	<0.01
	35	232	204	No	0.01	209	No	<0.01	213	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 4	Prob.		Level 4	Prob.		Level 4	Prob.
	40	232	206	No	0.02	212	No	0.01	216	No	<0.01
	45	232	208	No	0.04	214	No	0.03	218	No	<0.01
	50	232	210	No	0.07	216	No	0.05	220	No	<0.01
	55	232	212	No	0.11	218	No	0.09	223	No	0.01
	60	232	214	No	0.16	220	No	0.14	225	No	0.02
	65	232	216	No	0.23	223	No	0.25	227	No	0.08
	70	232	219	No	0.36	225	No	0.34	230	No	0.28
	75	232	221	Yes	0.5	228	Yes	0.5	233	Yes	0.61
	80	232	224	Yes	0.64	231	Yes	0.66	236	Yes	0.87
	85	232	227	Yes	0.77	234	Yes	0.79	239	Yes	0.98
	90	232	231	Yes	0.89	238	Yes	0.91	244	Yes	>0.99
	95	232	237	Yes	0.98	245	Yes	0.99	251	Yes	>0.99
7	5	236	189	No	<0.01	191	No	<0.01	192	No	<0.01
	10	236	195	No	<0.01	197	No	<0.01	199	No	<0.01
	15	236	199	No	<0.01	202	No	<0.01	204	No	<0.01
	20	236	203	No	<0.01	206	No	<0.01	208	No	<0.01
	25	236	206	No	<0.01	209	No	<0.01	211	No	<0.01
	30	236	208	No	0.01	211	No	<0.01	214	No	<0.01
	35	236	211	No	0.01	214	No	0.01	216	No	<0.01
	40	236	213	No	0.03	216	No	0.01	219	No	<0.01
	45	236	215	No	0.04	219	No	0.03	221	No	<0.01
	50	236	217	No	0.07	221	No	0.06	224	No	<0.01
	55	236	219	No	0.11	223	No	0.1	226	No	<0.01
	60	236	222	No	0.2	226	No	0.18	229	No	0.02
	65	236	224	No	0.27	228	No	0.26	231	No	0.08
	70	236	226	No	0.36	231	No	0.35	234	No	0.28
	75	236	229	Yes	0.5	233	No	0.45	237	Yes	0.61
	80	236	232	Yes	0.64	236	Yes	0.6	240	Yes	0.87

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 4	Prob.		Level 4	Prob.		Level 4	Prob.
	85	236	235	Yes	0.77	240	Yes	0.78	244	Yes	0.99
	90	236	239	Yes	0.89	245	Yes	0.93	249	Yes	>0.99
	95	236	246	Yes	0.98	251	Yes	0.99	256	Yes	>0.99
8	5	245	192	No	<0.01	194	No	<0.01	196	No	<0.01
	10	245	199	No	<0.01	201	No	<0.01	203	No	<0.01
	15	245	203	No	<0.01	206	No	<0.01	208	No	<0.01
	20	245	207	No	<0.01	210	No	<0.01	212	No	<0.01
	25	245	210	No	<0.01	213	No	<0.01	215	No	<0.01
	30	245	212	No	<0.01	216	No	<0.01	218	No	<0.01
	35	245	215	No	<0.01	219	No	<0.01	221	No	<0.01
	40	245	217	No	0.01	221	No	<0.01	224	No	<0.01
	45	245	220	No	0.02	224	No	0.01	226	No	<0.01
	50	245	222	No	0.03	226	No	0.02	229	No	<0.01
	55	245	224	No	0.05	228	No	0.04	231	No	<0.01
	60	245	227	No	0.1	231	No	0.08	234	No	<0.01
	65	245	229	No	0.15	233	No	0.13	237	No	0.01
	70	245	232	No	0.25	236	No	0.23	239	No	0.04
	75	245	234	No	0.32	239	No	0.31	242	No	0.2
	80	245	237	No	0.45	242	No	0.45	246	Yes	0.61
	85	245	241	Yes	0.63	246	Yes	0.65	250	Yes	0.92
	90	245	246	Yes	0.82	251	Yes	0.84	255	Yes	>0.99
	95	245	252	Yes	0.95	258	Yes	0.97	262	Yes	>0.99

Note. Prob. = Probability.

Table 3.10. Proficiency Projections Based on RIT Scores—ELA/Reading

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 4	Prob.		Level 4	Prob.		Level 4	Prob.
2	5	190	142	No	<0.01	149	No	<0.01	153	No	<0.01
	10	190	148	No	<0.01	155	No	<0.01	159	No	<0.01
	15	190	152	No	<0.01	159	No	<0.01	164	No	<0.01
	20	190	156	No	0.01	162	No	0.01	167	No	<0.01
	25	190	159	No	0.02	165	No	0.01	170	No	<0.01
	30	190	161	No	0.04	168	No	0.03	173	No	<0.01
	35	190	163	No	0.06	170	No	0.05	175	No	<0.01
	40	190	166	No	0.09	172	No	0.07	177	No	<0.01
	45	190	168	No	0.13	175	No	0.11	180	No	<0.01
	50	190	170	No	0.19	177	No	0.17	182	No	0.01
	55	190	172	No	0.22	179	No	0.24	184	No	0.04
	60	190	174	No	0.29	181	No	0.27	186	No	0.13
	65	190	177	No	0.41	183	No	0.36	188	No	0.28
	70	190	179	No	0.46	186	Yes	0.5	191	Yes	0.61
	75	190	182	Yes	0.59	188	Yes	0.59	193	Yes	0.8
	80	190	184	Yes	0.67	191	Yes	0.68	196	Yes	0.96
	85	190	188	Yes	0.78	194	Yes	0.8	200	Yes	>0.99
	90	190	192	Yes	0.89	199	Yes	0.91	204	Yes	>0.99
	95	190	198	Yes	0.96	205	Yes	0.98	210	Yes	>0.99
3	5	201	155	No	<0.01	160	No	<0.01	164	No	<0.01
	10	201	161	No	<0.01	167	No	<0.01	171	No	<0.01
	15	201	166	No	<0.01	171	No	<0.01	175	No	<0.01
	20	201	169	No	0.01	175	No	0.01	179	No	<0.01
	25	201	172	No	0.02	178	No	0.02	182	No	<0.01
	30	201	175	No	0.04	180	No	0.03	184	No	<0.01
	35	201	178	No	0.07	183	No	0.06	187	No	<0.01
	40	201	180	No	0.11	185	No	0.08	189	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 4	Prob.		Level 4	Prob.		Level 4	Prob.
	45	201	182	No	0.13	188	No	0.14	192	No	0.01
	50	201	185	No	0.22	190	No	0.2	194	No	0.02
	55	201	187	No	0.29	192	No	0.27	196	No	0.08
	60	201	189	No	0.37	194	No	0.32	198	No	0.2
	65	201	192	No	0.46	197	No	0.45	201	Yes	0.5
	70	201	194	Yes	0.54	199	Yes	0.55	203	Yes	0.72
	75	201	197	Yes	0.63	202	Yes	0.68	206	Yes	0.92
	80	201	200	Yes	0.75	205	Yes	0.76	209	Yes	0.99
	85	201	204	Yes	0.84	209	Yes	0.88	213	Yes	>0.99
	90	201	208	Yes	0.93	213	Yes	0.94	217	Yes	>0.99
	95	201	215	Yes	0.98	220	Yes	0.99	224	Yes	>0.99
4	5	207	166	No	<0.01	170	No	<0.01	173	No	<0.01
	10	207	173	No	<0.01	177	No	<0.01	179	No	<0.01
	15	207	177	No	0.01	181	No	<0.01	184	No	<0.01
	20	207	181	No	0.02	184	No	0.01	187	No	<0.01
	25	207	184	No	0.04	187	No	0.02	190	No	<0.01
	30	207	186	No	0.05	190	No	0.05	193	No	<0.01
	35	207	189	No	0.1	193	No	0.08	195	No	<0.01
	40	207	191	No	0.14	195	No	0.13	198	No	0.01
	45	207	194	No	0.2	197	No	0.19	200	No	0.02
	50	207	196	No	0.28	199	No	0.27	202	No	0.08
	55	207	198	No	0.36	202	No	0.35	204	No	0.2
	60	207	200	No	0.45	204	No	0.45	207	Yes	0.5
	65	207	203	Yes	0.55	206	Yes	0.55	209	Yes	0.72
	70	207	205	Yes	0.64	209	Yes	0.69	211	Yes	0.87
	75	207	208	Yes	0.76	211	Yes	0.73	214	Yes	0.98
	80	207	211	Yes	0.83	214	Yes	0.84	217	Yes	>0.99
	85	207	215	Yes	0.92	218	Yes	0.93	220	Yes	>0.99

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 4	Prob.		Level 4	Prob.		Level 4	Prob.
	90	207	219	Yes	0.96	222	Yes	0.98	225	Yes	>0.99
	95	207	226	Yes	0.99	229	Yes	>0.99	231	Yes	>0.99
5	5	211	175	No	<0.01	178	No	<0.01	180	No	<0.01
	10	211	181	No	<0.01	184	No	<0.01	186	No	<0.01
	15	211	186	No	0.01	189	No	0.01	191	No	<0.01
	20	211	189	No	0.03	192	No	0.03	194	No	<0.01
	25	211	192	No	0.06	195	No	0.05	197	No	<0.01
	30	211	195	No	0.11	197	No	0.08	199	No	<0.01
	35	211	197	No	0.16	200	No	0.15	202	No	0.01
	40	211	199	No	0.2	202	No	0.22	204	No	0.02
	45	211	201	No	0.27	204	No	0.26	206	No	0.08
	50	211	204	No	0.4	206	No	0.35	208	No	0.2
	55	211	206	No	0.45	209	Yes	0.5	211	Yes	0.5
	60	211	208	Yes	0.55	211	Yes	0.55	213	Yes	0.72
	65	211	210	Yes	0.64	213	Yes	0.65	215	Yes	0.87
	70	211	213	Yes	0.73	215	Yes	0.74	217	Yes	0.96
	75	211	215	Yes	0.8	218	Yes	0.85	220	Yes	0.99
	80	211	218	Yes	0.89	221	Yes	0.92	223	Yes	>0.99
	85	211	222	Yes	0.94	224	Yes	0.96	226	Yes	>0.99
	90	211	226	Yes	0.98	228	Yes	0.99	230	Yes	>0.99
	95	211	232	Yes	>0.99	235	Yes	>0.99	237	Yes	>0.99
6	5	216	181	No	<0.01	183	No	<0.01	185	No	<0.01
	10	216	187	No	<0.01	189	No	<0.01	191	No	<0.01
	15	216	191	No	0.01	193	No	0.01	195	No	<0.01
	20	216	195	No	0.03	197	No	0.02	198	No	<0.01
	25	216	198	No	0.06	199	No	0.04	201	No	<0.01
	30	216	200	No	0.07	202	No	0.06	203	No	<0.01
	35	216	202	No	0.11	204	No	0.1	206	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 4	Prob.		Level 4	Prob.		Level 4	Prob.
	40	216	205	No	0.2	206	No	0.16	208	No	0.01
	45	216	207	No	0.23	209	No	0.26	210	No	0.04
	50	216	209	No	0.31	211	No	0.31	212	No	0.13
	55	216	211	No	0.4	213	No	0.4	214	No	0.28
	60	216	213	Yes	0.5	215	Yes	0.5	216	Yes	0.5
	65	216	215	Yes	0.55	217	Yes	0.6	218	Yes	0.72
	70	216	218	Yes	0.69	219	Yes	0.69	221	Yes	0.92
	75	216	220	Yes	0.77	222	Yes	0.81	223	Yes	0.98
	80	216	223	Yes	0.86	225	Yes	0.9	226	Yes	>0.99
	85	216	226	Yes	0.93	228	Yes	0.95	229	Yes	>0.99
	90	216	231	Yes	0.98	232	Yes	0.98	233	Yes	>0.99
	95	216	237	Yes	>0.99	238	Yes	>0.99	239	Yes	>0.99
7	5	217	185	No	<0.01	186	No	<0.01	187	No	<0.01
	10	217	191	No	0.01	192	No	0.01	193	No	<0.01
	15	217	195	No	0.02	196	No	0.01	197	No	<0.01
	20	217	198	No	0.04	200	No	0.04	201	No	<0.01
	25	217	201	No	0.08	202	No	0.06	203	No	<0.01
	30	217	204	No	0.15	205	No	0.11	206	No	<0.01
	35	217	206	No	0.18	207	No	0.16	208	No	0.01
	40	217	208	No	0.24	210	No	0.27	211	No	0.04
	45	217	210	No	0.32	212	No	0.31	213	No	0.13
	50	217	212	No	0.41	214	No	0.4	215	No	0.28
	55	217	214	No	0.45	216	Yes	0.5	217	Yes	0.5
	60	217	217	Yes	0.59	218	Yes	0.6	219	Yes	0.72
	65	217	219	Yes	0.68	220	Yes	0.69	221	Yes	0.87
	70	217	221	Yes	0.76	223	Yes	0.8	224	Yes	0.98
	75	217	224	Yes	0.85	225	Yes	0.86	226	Yes	0.99
	80	217	226	Yes	0.9	228	Yes	0.93	229	Yes	>0.99

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 4	Prob.		Level 4	Prob.		Level 4	Prob.
	85	217	230	Yes	0.96	231	Yes	0.97	232	Yes	>0.99
	90	217	234	Yes	0.99	235	Yes	0.99	237	Yes	>0.99
	95	217	240	Yes	>0.99	241	Yes	>0.99	243	Yes	>0.99
8	5	221	188	No	<0.01	189	No	<0.01	190	No	<0.01
	10	221	194	No	0.01	195	No	<0.01	196	No	<0.01
	15	221	198	No	0.02	199	No	0.01	200	No	<0.01
	20	221	201	No	0.04	203	No	0.04	203	No	<0.01
	25	221	204	No	0.07	205	No	0.05	206	No	<0.01
	30	221	207	No	0.11	208	No	0.1	209	No	<0.01
	35	221	209	No	0.15	210	No	0.14	211	No	<0.01
	40	221	211	No	0.21	213	No	0.2	213	No	0.01
	45	221	214	No	0.29	215	No	0.28	216	No	0.08
	50	221	216	No	0.37	217	No	0.36	218	No	0.2
	55	221	218	No	0.45	219	No	0.45	220	No	0.39
	60	221	220	Yes	0.55	221	Yes	0.55	222	Yes	0.61
	65	221	222	Yes	0.63	223	Yes	0.64	224	Yes	0.8
	70	221	225	Yes	0.75	226	Yes	0.76	227	Yes	0.96
	75	221	227	Yes	0.82	228	Yes	0.83	229	Yes	0.99
	80	221	230	Yes	0.89	231	Yes	0.9	232	Yes	>0.99
	85	221	233	Yes	0.94	235	Yes	0.96	236	Yes	>0.99
	90	221	238	Yes	0.98	239	Yes	0.99	240	Yes	>0.99
	95	221	244	Yes	>0.99	245	Yes	>0.99	246	Yes	>0.99

Note. Prob. = Probability.

Table 3.11. Proficiency Projections Based on RIT Scores—Science

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
5	5	212	179	No	<0.01	182	No	<0.01	184	No	<0.01
	10	212	184	No	<0.01	187	No	<0.01	189	No	<0.01
	15	212	187	No	0.01	190	No	<0.01	192	No	<0.01
	20	212	190	No	0.02	193	No	0.01	195	No	<0.01
	25	212	192	No	0.04	195	No	0.02	197	No	<0.01
	30	212	194	No	0.05	197	No	0.04	199	No	<0.01
	35	212	196	No	0.09	199	No	0.07	201	No	<0.01
	40	212	198	No	0.14	201	No	0.12	203	No	0.01
	45	212	199	No	0.17	203	No	0.19	205	No	0.02
	50	212	201	No	0.25	204	No	0.19	207	No	0.08
	55	212	203	No	0.29	206	No	0.28	208	No	0.13
	60	212	204	No	0.34	208	No	0.38	210	No	0.28
	65	212	206	No	0.45	209	No	0.44	212	Yes	0.5
	70	212	208	Yes	0.55	211	Yes	0.56	214	Yes	0.72
	75	212	210	Yes	0.66	213	Yes	0.67	216	Yes	0.87
	80	212	212	Yes	0.75	216	Yes	0.77	218	Yes	0.96
	85	212	215	Yes	0.83	218	Yes	0.85	221	Yes	0.99
	90	212	218	Yes	0.91	221	Yes	0.93	224	Yes	>0.99
	95	212	223	Yes	0.97	226	Yes	0.99	229	Yes	>0.99
8	5	229	186	No	<0.01	187	No	<0.01	188	No	<0.01
	10	229	191	No	<0.01	193	No	<0.01	194	No	<0.01
	15	229	195	No	<0.01	196	No	<0.01	197	No	<0.01
	20	229	198	No	<0.01	199	No	<0.01	200	No	<0.01
	25	229	200	No	<0.01	202	No	<0.01	203	No	<0.01
	30	229	202	No	<0.01	204	No	<0.01	205	No	<0.01
	35	229	204	No	<0.01	206	No	<0.01	207	No	<0.01
	40	229	206	No	0.01	208	No	0.01	209	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
	45	229	208	No	0.01	210	No	0.01	211	No	<0.01
	50	229	210	No	0.02	211	No	0.01	213	No	<0.01
	55	229	211	No	0.03	213	No	0.02	215	No	<0.01
	60	229	213	No	0.05	215	No	0.04	217	No	<0.01
	65	229	215	No	0.08	217	No	0.07	219	No	<0.01
	70	229	217	No	0.1	219	No	0.11	221	No	0.01
	75	229	219	No	0.16	221	No	0.17	223	No	0.04
	80	229	222	No	0.26	224	No	0.3	226	No	0.2
	85	229	224	No	0.35	227	No	0.45	228	No	0.39
	90	229	228	Yes	0.55	230	Yes	0.61	232	Yes	0.8
	95	229	233	Yes	0.78	236	Yes	0.86	238	Yes	0.99

Note. Prob. = Probability.

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